

WHAT IS CLAIMED IS:

1. A receiver comprising:

5 a receiving unit (3) containing variable gain amplifiers (4a, 8a) capable of amplifying a reception wave with variable gain values, without degrading NF (Noise Figure) performance and distortion performance under a certain supplied power;

a gain control signal-generating unit (21) for generating a gain control signal (S5) for designating said gain values in said variable gain amplifiers according to a received power of said reception wave;

10 a control unit (12); and

a memory (13),

wherein

said memory stores supplied power values to said receiving unit that are associated with said gain values; and

15 said control unit controls a power to be supplied to said receiving unit by referencing said supplied power values stored in said memory based on said gain values designated by said gain control signal.

2. The receiver according to claim 1, further comprising:

20 a processing unit (12a), and wherein:

said receiving unit is capable of discontinuous reception of said reception wave;

said gain values designated by said gain control signal are written into said memory each time said discontinuous reception takes place;

25 said processing unit calculates an average value of said gain values using said

gain values that have been written into said memory during discontinuous reception; and

said control unit controls said power to be supplied to said receiving unit by referencing said supplied power values stored in said memory based on said average value of said gain values calculated by said processing unit.

5

3. The receiver according to claim 2, wherein said processing unit calculates said average value by performing weighting such that contribution of more recent data among a plurality of said gain values are greater.

10

4. The receiver according to claim 2, further comprising:

a moving speed detector (16) capable of detecting a moving speed of said receiver, and wherein

said processing unit performs correction so that when said moving speed value is greater, said average value becomes smaller.

15

5. The receiver according to claim 2, wherein, when said gain control signal-generating unit generates a latest one of said gain control signal during discontinuous reception, said control unit again controls a power to be supplied to said receiving unit by referencing said supplied power values stored in said memory based on a gain value designated by said latest one of said gain control signal.

20

6. A transmitter-receiver, comprising:

a receiving unit (3) containing variable gain amplifiers (4a, 8a) capable of amplifying a reception wave with variable gain values, without degrading NF (Noise Figure) performance and distortion performance under a certain supplied power;

25

a gain control signal-generating unit (21) for generating a gain control signal (S5) for designating said gain values in said variable gain amplifiers according to a received power of said reception wave;

a transmitter unit (10) for generating a transmission wave;

5 a transmission power detecting unit (11) for detecting a power of said transmission wave;

a control unit (12); and

a memory (13),

wherein

10 said memory stores supplied power values to said receiving unit that are associated with said gain values and said power of said transmission wave; and

said control unit controls a power to be supplied to said receiving unit by referencing said supplied power values stored in said memory based on said gain values designated by said gain control signal and a detection result in said transmission power

15 detecting unit.